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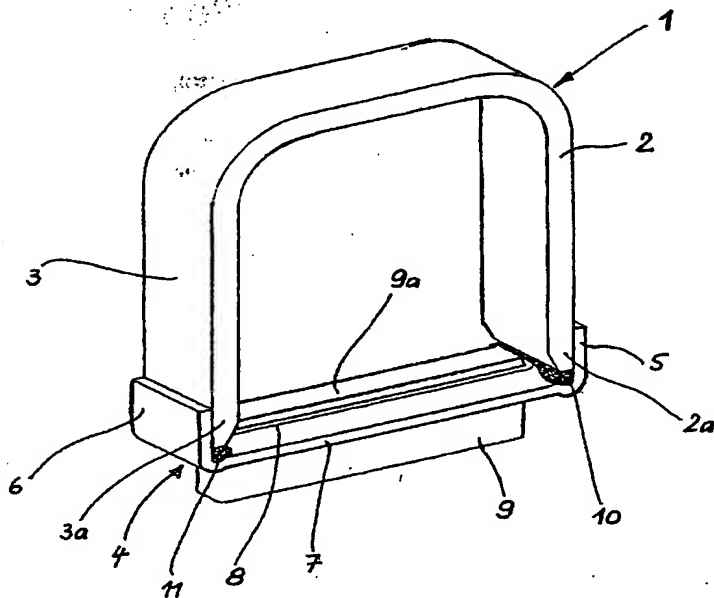
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(54) Title: HEAT EXCHANGER, ESPECIALLY A CHARGE-AIR COOLER FOR MOTOR VEHICLES

(54) Bezeichnung: WÄRMEÜBERTRAGER, INSBESONDERE LADELÜFTKÜHLER FÜR KRAFTFAHRZEUGE



(57) Abstract: The invention relates to a heat exchanger, especially a charge-air cooler for motor vehicles, comprising flat tubes (9) with tube ends (9a), and collecting tanks (1) which are connected to tube plates (4), said tube plates (4) comprising openings (8) provided with long sides (8a) and short sides (8b) for receiving the tube ends (9a), in addition to edge strips (5, 6) and transition regions (12, 13) which are embodied in a groove-type manner and located between the short sides (8b) and the edge strips (5, 6), the tube ends (9a) being soldered in the openings (8). According to the invention, the transition regions (12, 13) comprise a reinforcing element.

(57) Zusammenfassung: Die Erfindung betrifft einen Wärmeübertrager, insbesondere Ladeluftkühler für Kraftfahrzeuge mit Rohrenden (9a) aufweisenden Flachrohren (9), Sammelkästen (1), die mit Rohrböden (4) verbunden sind, wobei die Rohrböden (4) Öffnungen (8) mit Längsseiten (8a) und Schmalseiten (8b) zur Aufnahme der Rohrenden (9a),

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